#### Whereas.

The City of Savannah's Mayor and Aldermen was issued a NPDES MS-4 permit number NPDES Permit No. GAS000205 by the State of Georgia Environmental Protection Division of the Department of Natural Resources.

Permit GAS000205 requires that the City adopt and enforce certain environmental regulations as permittee. These regulations require adoption of the model ordinance contained within the Coastal Stormwater Supplement (CSS) to the Georgia Stormwater Management Manual (GSMM), or its equal, on or before April 13, 2012.

Therefore, the City of Savannah has updated its Stormwater Management Ordinance, pursuant to the permit. The new version of the Stormwater Management Ordinance shall become effective at Noon on Sunday, April 1, 2012.

#### **CHAPTER 11. STORMWATER MANAGEMENT\***

\*Cross references: Municipal utilities, pt. 5.

#### ARTICLE A. IN GENERAL

#### **Findings of Fact**

It is hereby determined that:

- (a) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, which could increase incidents of flooding thereby endangering infrastructure, public and private property and human life;
- (b) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters water levels and fluctuations and increases pollutant transport and deposition in wetlands, rivers and streams;
- (c) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and alters salinity concentrations and fluctuations and increases primary productivity and pollutant transport and deposition in estuaries;
- (d) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates, volumes and pollutant loads, and increases bacteria transport and deposition in near coastal waters, which leads to beach contamination and poses a serious threat to human health;

- (e) The land development process significantly alters the hydrologic response of development sites, increasing stormwater runoff rates and volumes, and decreases the amount of rainfall that is available to recharge shallow groundwater aquifers;
- (f) The negative impacts of the land development process on local aquatic resources can adversely affect the health, safety and general welfare of the general public as well as the quality of life of its citizens;
- (g) Every residential and non-residential parcel of real property, both public and private, benefits from the implementation of storm water management regulations as well as proper maintenance and operation of the municipal storm sewer system (MS4);
- (h) The negative impacts of the land development process can be controlled and minimized through the management of stormwater runoff rates, volumes and pollutant loads;
- (i) Communities located within Georgia's Coastal Nonpoint Source Management Area and Areas of Special Interest are required to comply with a number of state and federal regulations that require the adverse impacts of the land development process to be controlled and minimized;
- (j) It is widely recognized that Green Infrastructure means interconnected natural systems and ecological processes that provide clean water, air quality and wildlife habitat. Low Impact Development (LID) is an approach to land development that uses various land planning and design practices and technologies to simultaneously conserve and protect natural resource systems and reduce infrastructure costs. When incorporated with stormwater management plans, and strategically planned, Green Infrastructure and Low Impact Development will provide great benefit to the citizens of Savannah.
- (k) Therefore, the City of Savannah has determined that it is in the public interest to control and minimize the adverse impacts of the land development process and has established this set of local stormwater management regulations to control post-construction stormwater runoff rates, volumes and pollutant loads on development and redevelopment sites.

#### **Purpose and Intent**

The purpose of this ordinance is to protect and maintain the integrity of local aquatic resources and, consequently, the health, safety and welfare of the general public, by establishing local stormwater management regulations that control and minimize the adverse impacts of the land development process. The ordinance seeks to achieve these goals by enacting provisions that:

- (1) Protect, maintain, and enhance the short term and long term public health, safety, and general welfare. This objective will be achieved by providing for regulation and management of a municipal storm sewer system, including public and private facilities, in the city's service area;
- (2) Comply with the Georgia Department of Natural Resources (DNR) and federal Environmental Protection Agency (EPA) stormwater regulations developed pursuant to the Clean Water Act. These requirements include:
  - a) Control the discharge of stormwater and contribution of pollutants to the municipal storm sewer system (MS4) by stormwater discharges associated with impervious area and the quality of stormwater discharged from sites' impervious area;

- b) Prohibit illicit connections and/or discharges to the MS4:
- c) Control discharge to municipal storm sewers of spills, dumping or disposal of materials other than stormwater; and
- d) Control, through intergovernmental agreements, contribution of pollutants from one municipal/county system to another.
- (3) Establish minimum requirements and procedures to regulate the adverse effects of increased stormwater runoff and development in flood hazard areas.
- (4) Establish decision-making processes that can be applied during the site planning and design process to help protect the integrity of local aquatic resources.
- (5) Establish post-construction stormwater management and site planning and design criteria to help protect natural resources from the direct impact of the land development process and preserve existing hydrologic conditions on development sites;
- (6) Establish post-construction stormwater management and site planning and design criteria to help reduce flooding, channel erosion and pollutant transport and deposition in local aquatic resources;
- (7) Establish design guidelines for green infrastructure and stormwater management practices that can be used to meet the post-construction stormwater management and planning and design criteria;
- (8) Encourage green infrastructure practices, including better site planning techniques, better site design techniques and low impact development practices, be used to the maximum extent practical on development sites;
- (9) Establish provisions for the long-term inspection and maintenance of green infrastructure and stormwater management practices to ensure that they continue to function as designed and pose no threat to public safety; and,
- (10)Establish administrative procedures for the submittal, review, approval and disapproval of stormwater management plans and for the inspection of approved development projects.

#### Sec. 4-11001. Short title.

This chapter shall be known as the City of Savannah stormwater management ordinance.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11003. Applicability of chapter.

(a) This chapter shall apply to all existing and future discharges to the city separate stormwater system.

- (b) If any term, requirement or provision of this chapter becomes invalid or unenforceable, the remainder of this chapter shall not be affected, and any and all other requirements and provisions shall remain valid and be enforced to the fullest extent.
- (c) When this chapter is in conflict with other ordinances, the ordinance with the most stringent requirements shall apply as determined by the Stormwater Management Director

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11004. Restrictions and limitations on the use of the city stormwater system.

The primary purpose of the stormwater system is the conveyance of stormwater and other permissible discharges as outlined in section 4-11027.

- (1) No person shall discharge, spill, or dump substances or materials which are not entirely composed of stormwater or discharges otherwise exempted in section 4-11027 of this chapter into the city separate stormwater system or onto driveways, sidewalks, parking lots, streets, or other areas that discharge into the city separate stormwater system.
- (2) It shall be unlawful for any person to maliciously, willfully, or negligently break, damage, destroy, uncover, deface, modify, or tamper with any stormwater structure, appurtenance, or equipment.
- (3) It shall be unlawful, without prior written approval of the director, to alter in any way any part of the stormwater system including, but not limited to, rerouting, removing, deepening, widening, enlarging, filling or obstructing any part of the stormwater system including fencing easements and rights-of-way which render the system inaccessible to equipment necessary to perform maintenance and repairs.
- (4) It shall be unlawful for any person to connect any pipe, open channel, or any other conveyance system that discharges anything except stormwater or exempted discharges listed in section 4-11027 of this chapter to the city separate stormwater system. Illicit connections will be disconnected and redirected to the city sanitary sewer system upon approval by the Public Works Director, at the expense of the responsible person.
- (5) It shall be unlawful to increase stormwater quantity discharged to the city separate stormwater system without an accepted stormwater management plan.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11005. Stormwater management department responsibilities.

The stormwater management department shall be responsible for the management, maintenance, and improvement of the city's separate stormwater system, including activities necessary to control and monitor stormwater runoff quantity and quality.

The stormwater management department will:

- (1) Administer the city's stormwater management program;
- (2) Coordinate acceptance of stormwater management plans with city engineering with final acceptance based upon recommendations from the city engineering department;
- (3) Direct operations and maintenance of the city's stormwater facilities to ensure optimal levels of service:
- (4) Establish and update this chapter and the stormwater management <u>Local Design Manual</u> to include development standards and guidelines for regulating quantity and quality of stormwater runoff in compliance with NPDES permit requirements and changes in federal and state regulations;
- (5) Monitor private property discharges to the city separate stormwater system;
- (6) Take immediate steps to minimize effects of accidental discharges of pollutants into the city's stormwater system;
- (7) Develop stormwater educational and public awareness programs.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11006. Criteria for variance.

The Stormwater Management Director, or his designee, may grant a variance from the requirements of this article if exceptional circumstances applicable to a site exist such that strict adherence to the provisions of the article will result in unnecessary hardship and will not fulfill the intent of the article. The Stormwater Management Director, or his designee, may grant a variance from requirements of this article if the proposed development activity will not:

- (1) Increase in rate, volume, or concentration of runoff to the exiting downstream storm sewer system;
- (2) Increase the base flood elevation upstream or downstream; or
- (3) Have a negative impact on any wetland, watercourse, or water body; or
- (4) Contribute to degradation of water quality.

A written request for a variance shall be required and shall state the specific variance sought and the reasons, with supporting data, a variance should be granted. The request shall include all information necessary to evaluate the proposed variance. The Stormwater Management Director, or his designee, will conduct a review of the request for a variance within 10 working days of receiving the request.

#### Sec. 4-11007. Variance procedures.

A written request for a variance shall be required and shall state the specific variance sought and the reasons, with supporting data, a variance should be granted. The request shall include all information necessary to evaluate the proposed variance. The Stormwater Management Director, or his designee, will conduct a review of the request for a variance within 10 working days of receiving the request.

# Sec. 4-11008. Inspections.

The stormwater management department may inspect, survey, and monitor any stormwater facility, public or private, for reasons including but not limited to the following:

- (1) To ensure compliance with an accepted stormwater management plan;
- (2) To conduct sampling of any substance or parameters at any location;
- (3) To investigate suspicious discharges including illicit connections and spills;
- (4) To ensure all stormwater facilities are operational to the maximum extent practicable;
- (5) To determine compliance with requirements of construction plans;
- (6) To determine compliance with requirements of maintenance plans;
- (7) The City of Savannah shall be allowed to conduct periodic inspections of the development project in accordance with applicable sections of this ordinance;

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11009. Powers and authority of inspectors.

The director of stormwater management and other employees of the city bearing proper identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, testing. The city reserves the right to perform emergency repairs or maintenance to any portion of any stormwater system, public or private, when the stormwater system impacts a public stormwater system.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11010. Discharge violation; remediation plan.

Any action or inaction that violates the provisions of this ordinance or the requirements of an approved stormwater management design plan, land development related permit, or inspection and maintenance agreement and plan, may be subject to the enforcement actions outlined in this chapter. Any such action or inaction that is continuous with respect to time may be deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

(a) Notice of Violation - If the City of Savannah determines that an owner, applicant or other responsible person has violated or is violating the provisions of this ordinance, or the terms and conditions of an approved stormwater management design plan, permit or inspection and maintenance agreement and plan, it shall issue a written notice of violation to said owner, applicant or other responsible person. Where a person is engaged in a new development or redevelopment activity covered by this ordinance without having first secured a stormwater management permit, the notice of violation shall be served on the owner, applicant, and/or the person in charge of the new development or redevelopment activity being conducted on the development site.

The notice of violation shall contain the following information:

- (1) The name and address of the owner, applicant or other responsible person;
- (2) The address or other description of the site upon which the violation is occurring;
- (3) A statement specifying the nature of the violation;
- (4) A description of the remedial measures necessary to bring the action or inaction into compliance with the provisions of this ordinance, or the terms and conditions of the approved\_stormwater management design plan, permit or inspection and maintenance agreement and plan, and the date for the completion of such remedial measures; and,
- (5) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is issued;
- (6) A statement that the determination of violation may be appealed to the City of Savannah by filing a written notice of appeal within thirty (30) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or safety, a written notice of appeal must be filed within 24 hours after the notice of violation).

In addition, any person who is found to have willingly and negligently failed to comply with any provisions of this article and the orders, rules, and regulations issued hereunder, shall be subject to any one or more of the following actions or penalties.

- (b) Upon receipt of notice of violation, the violator shall submit a remediation plan and a remediation schedule to the Stormwater Director within ten days. The remediation plan shall include immediate correction where requested, otherwise all corrective and preventative measures shall be completed within 30 days of the initial notice of violation.
- (c) In the event that the remedial measures described in the remediation plan or specified in the notice of violation have not been completed by the date set forth, any one or more of the enforcement actions outlined in this ordinance may be taken against the responsible party.
- (d) If, after inspection, the condition of a facility presents an immediate danger to the public health or because of unsafe conditions or improper maintenance, the City shall have the right to take action as may be necessary to protect the public and make the facility safe at the expense of the owner of the facility in accordance with this ordinance. Expenses, if charged, shall be those direct costs incurred and those expenses documented in general accordance with Chapter 7 of FEMA document P-323, Public assistance applicant handbook of latest revision. (Ord. of 12-7-1995(1), § 1)

Before taking any of the following actions or imposing any of the following penalties, the City of Savannah shall first notify the owner, applicant or other responsible person in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours notice shall be sufficient) to correct the violation. In the event the owner, applicant or other responsible person fails to correct the violation by the date set forth in said notice, the Stormwater Management Director may take any one or more of the following actions or impose any one or more of the following penalties.

(1) **Stop Work Order**: The City of Savannah may issue a stop work order that shall be served on the owner, applicant or other responsible person. The stop work order shall remain in effect until the owner, applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein. The stop work order may temporarily be withdrawn or modified by the *City of Savannah* to enable the applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

- (2) **Withhold Certificate of Occupancy**: The City of Savannah may refuse to issue a certificate of occupancy for the building or other structure constructed or being constructed on the development site until the owner, applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein.
- (3) **Suspension, Revocation, or Modification of Permit**: The City of Savannah may suspend, revoke or modify the permit authorizing the development project. A suspended, revoked or modified permit may be reinstated after the owner, applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein. The permit may be modified by the *City of Savannah* to enable the owner, applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.
- (4) **Civil Penalties**: In the event the owner, applicant or other responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to correct the violation or violations described therein, by the date set forth in the notice of violation, the City of Savannah may impose a penalty not to exceed \$1,000 (depending on the severity of the violation) for each day the violation remains unremedied after the date set forth in the notice of violation.
- (5) **Criminal Penalties**: For intentional and flagrant violations of this ordinance, the City of Savannah may issue a citation to the owner, applicant or other responsible person, requiring said person to appear in City of Savannah Recorders Court to answer to criminal charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed \$1,000, imprisonment for up to 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

# Sec. 4-11011. Emergency conditions.

If a condition presents an immediate danger to the public health, safety, or general welfare because of unsafe conditions or improper maintenance, the city shall have the right, should the owner not take immediate action, to make necessary corrections to protect the public and to make the facility safe at the expense of the responsible person. Expenses, if charged, shall be those direct costs incurred and those expenses documented in general accordance with Chapter 7 of FEMA document P-323, Public assistance applicant handbook of latest revision

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11012. Enforcement.

Enforcement of this chapter is final unless the person submits a written request for a hearing within ten days of the notice of violation being served.

(Ord. of 12-7-1995(1), § 1)

#### **APPEALS**

Sec. 4-11013. Appeals.

- (1) Any person aggrieved by a decision of the Stormwater Management Director, or his designee, (including any decision with reference to the granting or denial for a variance from the terms of this article,) may appeal same by filing a written notice of appeal with the City Manager within five days of the issuance of said decision by the Stormwater Management Director, or his designee, .A notice of appeal shall state specific reasons.
- (2) The City Manager shall prepare and send to City Council and appellant a written response to said notice of appeal within ten days of receipt of the notice of appeal.
- (3) All appeals shall be heard by City Council. The hearing shall be held within 30 days after receipt of notice of appeal or a date mutually agreed upon in writing by the appellant and the City Manger. The City Council shall then make its findings within ten days of the appeal hearing.
- (4) If the appellant is dissatisfied with City Council's decision, he or she can appeal said decision to the Superior Court of the County.

#### Sec. 4-11014. Definitions

"Accidental discharge" shall mean a discharge prohibited by this chapter into the city separate stormwater system which occurs by chance and without planning or consideration prior to occurrence.

- "Agricultural practices" shall mean practices involving the establishment, cultivation, or harvesting of products of the field or orchard; the preparation and planting of pastureland, farm ponds; and the construction of farm buildings.
- "Applicant" means a property owner or agent of a property owner who has submitted an application for a post-construction stormwater management permit.
- "Aquatic Buffer" means an area of land located around or near a stream, wetland, or waterbody that has intrinsic value due to the ecological services it provides, including pollutant removal, erosion control and conveyance and temporary storage of flood flows.
- "Aquatic Resource Protection" means measures taken to protect aquatic resources from several negative impacts of the land development process, including complete loss or destruction, stream channel enlargement and increased salinity fluctuations.
- "Better Site Design Techniques" means site design techniques that can be used during the site planning and design process to minimize land disturbance and the creation of new impervious and disturbed pervious cover. Better site design techniques include reducing clearing and grading limits, reducing roadway lengths and widths and reducing parking lot and building footprints.
- "Better Site Planning Techniques" means site planning techniques that can be used during the site planning and design process to protect valuable aquatic and terrestrial resources from the direct impacts of the land development process. Better site planning techniques include protecting primary and secondary conservation areas.
- "Best management practices (BMPs)" shall mean a wide range of management procedures, activities, and prohibitions or practices which control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.
- "Building" means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal or property and occupying more than 100 square feet of area.
- "City separate stormwater system" shall mean a conveyance or system of conveyances (including roads with drainage systems, highways, rights-of-way, city streets, catchbasins, curbs, gutters, ditches, both natural and manmade channels, storm drains, detention ponds, drainage easements, other stormwater facilities) which meets all the following criteria:

Owned or maintained by the City of Savannah;

Designed or used for collecting or conveying stormwater;

Not a known combined sewer; and

Not part of a publicly owned treatment works (POTW).

"Channel" means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

- "Conservation Areas" means permanently protected areas of a site that are preserved, in perpetuity, in an undisturbed, natural state.
- "Conservation Easement" means a legal agreement between a land owner and a local, state or federal government agency or land trust that permanently protects conservation areas on the owner's land by limiting the amount and type of development that can take place within them but continues to leave the conservation areas in private ownership.
- "Conveyance" shall mean stormwater facilities designed for the movement of stormwater through the drainage system, such as concrete or metal pipes, ditches, depressions, swales.
- "Critical Water Resource Area" means a City-designated drainage area that is assigned special stormwater design criteria in the Local Design Manual.
- "Dedication" means the deliberate appropriation of property by its owner for general public use.
- "Department" shall mean the City of Savannah stormwater management department.
- "Detention" means the temporary storage of stormwater runoff in a stormwater management practice for the purpose of controlling the peak discharge rates and providing gravitational settling of pollutants.
- "Developer" means a person who undertakes a land development project.
- "Development" shall mean:

The division of a lot, tract or parcel of land into two or more lots, plots, sites, tracts, parcels, or other divisions by plat or deed;

The construction, installation, or alteration of a structure, impervious surface, or drainage facility;

Clearing, scraping, grubbing, or other activities that significantly disturb the soil, vegetation, mud, sand or rock of a site; or

Adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging, or otherwise disturbing the soil, vegetation, mud, sand or rock of a site.

- "Development Project" means a new development or redevelopment project.
- "Development Site" means a parcel of land where land disturbing activities have been or will be initiated to complete a land development project.
- "Director" shall mean the director of stormwater management department
- "Discharge" shall mean the release of stormwater to the city separate stormwater system.
- "Drainage" shall mean the removal of stormwater from a given area either by gravity or by pumping.

- "Drainage Easement" means a legal right granted by a land owner to a grantee allowing the grantee to convey, treat or manage stormwater runoff on the private land subject to the drainage easement.
- "Easement" means a legal right granted by a land owner to a grantee allowing the use of private land for conveyance, treatment and management of stormwater runoff and access to green infrastructure and stormwater practices.
- "Employee" shall mean any city employee as designated by the city manager to have authority in stormwater management, planning, maintenance, or construction.
- "Exempt" shall mean the release of the obligation to comply with specific sections of this chapter.
- "Erosion and Sediment Control Plan" means a plan that is designed to minimize and control the accelerated erosion and increased sediment loads that occur at a site during land disturbing activities.
- "Evapotranspiration" means the loss of water to the atmosphere through both evaporation and transpiration, which is the evaporation of water from the aerial parts of plants.
- **"Extended Detention"** means the temporary storage of stormwater runoff in a stormwater management practice for an extended period of time, typically 24 hours or greater.
- "Extreme Flood Protection" means measures taken to protect downstream properties from dangerous extreme flooding events and help maintain the boundaries of the existing 100-year floodplain.
- "Fee in Lieu Contribution" means a payment of money in place of meeting all or part of the stormwater management criteria required by a post-construction stormwater management ordinance.
- "Flood" shall mean a general and temporary condition of partial or complete inundation of normally dry land areas from:

The overflow of inland or tidal waters: or

The unusual and rapid accumulation or runoff of surface waters from any source.

- "Flooding" means a volume of stormwater runoff that is too great to be confined within the banks of a stream, river or other aquatic resource or walls of a stormwater conveyance feature and that overflows onto adjacent lands.
- "Green Infrastructure Practices" means the combination of three complementary, but distinct, groups of natural resource protection and stormwater management practices and techniques, including better site planning, better site design techniques, and low impact development practices. These practices protect valuable terrestrial and aquatic resources from the direct impacts of the land development process, maintain pre-development site hydrology and reduce post-construction stormwater runoff rates, volumes and pollutant loads.

- "Hotspot" shall mean the same as Stormwater Hotspot, described elsewhere in these definitions.
- "Hydrologic Soil Group (HSG)" means a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.
- "Illicit connection" shall mean an unauthorized or illegal connection to a city separate stormwater system which results in discharge that is not composed entirely of stormwater runoff.
- "Impaired Waters" means those streams, rivers, lakes, estuaries and other water bodies that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.
- "Impervious Cover" means a surface composed of any material that greatly impedes or prevents the natural infiltration of water into the underlying native soils. Impervious surfaces include, but are not limited to, rooftops, buildings, sidewalks, driveways, streets and roads.
- "Indirect discharge" shall mean any discharge to the city's separate stormwater system via another conveyance system that is not owned, operated, or maintained by the city.
- "Industrial Stormwater Permit" means a National Pollutant Discharge Elimination System (NPDES) permit issued to an industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.
- "Infill Development" means land development that occurs within designated areas based on local land use, watershed and/or utility plans where the surrounding area is generally developed, and where the site or area is either vacant or has previously been used for another purpose.
- "Infiltration" means the process of allowing stormwater runoff to percolate into the underlying native soils.
- "Infiltration Practice" means a green infrastructure or stormwater management practice designed to provide infiltration of stormwater runoff into the underlying native soils. These stormwater management practices may be above or below grade.
- "Inspection and Maintenance Agreement and Plan" means a written agreement and plan providing for the long-term inspection and maintenance of all green infrastructure practices, stormwater management practices, stormwater conveyance features and stormwater drain infrastructure on a development site.
- "Jurisdictional Wetland" means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

- "Land Development" means any project undertaken to change or improve a site that involves one or more land disturbing activities.
- "Land Disturbing Activity" means any activity that changes stormwater runoff rates, volumes and pollutant loads on a site. These activities include, but are not limited to, the grading, digging, cutting, scraping, or excavating of soil, the placement of fill materials, paving, construction, substantial removal of vegetation and any activity that bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.
- "Land Owner" means the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.
- "LDM" or "Local Design Manual" means the manual of design practices and approval process prescribed by the City of Savannah Stormwater Management Department.
- "Low Impact Development Practice" means small-scale stormwater management practices that are used to disconnect impervious and disturbed pervious surfaces from the storm drain system and reduce post-construction stormwater runoff rates, volumes and pollutant loads. Low impact development practices include soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.
- "Maintenance" shall mean any action necessary to preserve stormwater facilities in proper working condition, in order to serve the intended purposes set forth in this chapter
- "Maximum extent practicable (MEP)" shall mean the discharge standards and controls necessary for the reduction of pollutants discharged into the city separate stormwater system. These standards and controls may consist of a combination of best management practices, control techniques, system design and engineering methods, and such other provisions for the reduction of pollutants discharged from the city separate stormwater system.
- "National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit" means a permit issued by the EPA, or by a State under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the State, whether the permit is applicable on an individual, group, or general area-wide basis.
- "New Development" means a land development project undertaken on a previously undeveloped or unimproved site.
- "Nonpoint Source Pollution" means pollution from any source other than from a discernible, confined and discrete conveyance, such as a wastewater treatment plant or industrial discharge. Sources of nonpoint source pollution include, but are not limited to, agricultural, silvicultural, mining and construction activities, subsurface disposal and urban stormwater runoff.
- "Nonstructural Stormwater Management Practice" means any natural resource protection or stormwater management practice or technique that uses natural processes and natural systems to intercept, convey, treat and/or manage stormwater runoff. Nonstructural stormwater management practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths,

reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

- "Off-Site Stormwater Management Practice" means a green infrastructure or stormwater management practice located outside the boundaries of a development site.
- "On-Site Stormwater Management Practice" means a green infrastructure or stormwater management practice located within the boundaries of a development site.
- "Overbank Flood Protection" means measures taken to protect downstream properties from damaging overbank flooding events.
- "Owner" means the legal or beneficial owner of a piece of land, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm, or corporation in control of the site.
- "Permanent Stormwater Management Practice" means a green infrastructure or stormwater management practice that will be operational after the land disturbing activities are complete and that is designed to become a permanent part of the site for the purposes of managing post-construction stormwater runoff.
- "Permit" means the permit issued by a local development review authority to an applicant, which is required for undertaking any land development project or land disturbing activities.
- "Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision, any interstate body, or any other legal entity.
- "Pollutant" shall mean any substance contributing to the contamination or alteration of stormwater's physical, chemical or biological properties, including change in temperature, taste, color, turbidity, or odor; by the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters that will or is likely to create a nuisance or have a detrimental impact on the city's stormwater system which would preclude the legitimate use of such a system.
- "Post-Development Hydrology" refers to the set of hydrologic conditions that may reasonably be expected to exist on a development site, after the completion of all land disturbing and construction activities.
- "Pre-Development Hydrology" refers to the set of hydrologic conditions that exist on a development site prior to the commencement of any land disturbing activities and at the time that plans for the land development project are approved by the local development review authority.
- "Private property" shall mean property or facilities owned by individuals, corporations, and organizations other than the city, state, or federal government.
- "Procedure" shall mean the method adopted by the city, by and through the director, to implement a regulation or regulations adopted under this chapter, or to carry out other

responsibilities as may be required by this Code or other codes, ordinances or resolutions of the City of Savannah or other agencies.

- "Quality" shall mean those parameters of stormwater that relate to the physical, chemical, biological or radiological integrity of stormwater.
- "Quantity" shall mean those characteristics of stormwater that relate to the rate, volume, and duration of concentration of stormwater runoff.
- "Receiving Stream" or "Receiving Aquatic Resource" means the body of water or conveyance into which stormwater runoff is discharged.
- "Recharge" means the replenishment of groundwater aguifers.
- "Redevelopment" means a change to previously existing, improved property, including but not limited to the demolition or building of structures, filling, grading, paving, or excavating, but excluding ordinary maintenance activities, remodeling of buildings on the existing footprint, resurfacing of paved areas and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution.
- "Regional Stormwater Management Practice" means a stormwater management practice designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may participate in providing land, financing, design services, construction services and/or maintenance services for the practice.
- "Regulation" shall mean any local, state, or federal rule, ordinance, design directive or other policies adopted by the mayor and aldermen pursuant to the requirements of this chapter.
- "Responsible Party" means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns that is named on a stormwater inspection and maintenance agreement and plan as responsible for the long-term operation and maintenance of one or more green infrastructure or stormwater management practices.
- "Sanitary sewer system" means the complete sanitary sewer system of the City of Savannah which discharges sewage directly or indirectly into the sewage treatment plant, including sanitary sewer pipelines, manholes and flushing inlets and appurtenances.
- "Sediment" shall mean solid particulate matter, both mineral and organic, that has been or is being transported by water, air, ice or gravity from its origin.
- "Site" means development site.
- "Stop Work Order" means an order issued that requires that all land disturbing activity on a site be stopped.
- "Stormwater" shall mean precipitation runoff, snowmelt runoff, and surface runoff.
- "Stormwater Hotspot" means an area where land use or pollution generating activities have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess

of those typically found in stormwater runoff. Stormwater hotspots include, but are not limited to, fueling stations (including temporary fueling stations during construction), golf courses, public works yards and marinas.

- "Stormwater Management" means the interception, conveyance, treatment and management of stormwater runoff in a manner that is intended to prevent increased flood damage, channel erosion, habitat degradation and water quality degradation and to enhance and promote the public health, safety and general welfare.
- "Stormwater management facilities" shall mean any and all components of a stormwater drainage system, designed to perform a particular function, or multiple functions, including, but not limited to, pipes, swales, ditches, culverts, streets, detention basins, retention basins, constructed wetlands, infiltration devices, catchbasins, oil/water separators, sediment basins, natural systems, modular pavement and pump stations
- "Stormwater Management Plan" means a written document that details how stormwater runoff will be managed on a development site and that shows how the stormwater management criteria that apply to the development project have been met.
- "Stormwater Management Practice" means a practice or technique, either structural or nonstructural, that is used to intercept stormwater runoff and change the characteristics of that runoff. Stormwater management practices are used to control post-construction stormwater runoff rates, volumes and pollutant loads to prevent increased flood damage, channel erosion, habitat degradation and water quality degradation.
- "Stormwater Management System" means the entire suite of green infrastructure and stormwater management practices and stormwater conveyance features that are used to intercept, convey, treat and manage stormwater runoff on a development site.
- "Stormwater Retrofit" means a green infrastructure or stormwater management practice designed for an existing development site that previously had no green infrastructure or stormwater management practice in place or had a practice that was not meeting local stormwater management criteria.
- "Stormwater Runoff" means surface water resulting from precipitation.
- "Stormwater Runoff Reduction" means providing for the interception, evapotranspiration, infiltration, or capture and reuse of stormwater runoff to help maintain pre-development site hydrology and help protect aquatic resources from several indirect impacts of the land development process, including decreased groundwater recharge, decreased baseflow and degraded water quality.
- "Subdivision" means the division of a parcel of land to create one or more new lots or development sites for the purpose, whether immediately or in the future, of sale, transfer of ownership, or land development, and includes divisions of land resulting from or made in connection with the layout or construction of a new street or roadway or a change in the layout of an existing street or roadway.
- "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

- "Watershed Management Plan" or "Subwatershed Management Plan" means a document, usually developed cooperatively by government agencies and other stakeholders, to protect, restore and/or otherwise manage the water resources found within a particular watershed or subwatershed. Watershed or subwatershed management plans commonly identify threats, sources of impairment, institutional issues and technical and programmatic solutions or projects to protect and/or restore water resources.
- "Water Quality Protection" means adequately treating stormwater runoff before it is discharged from a development site to help protect downstream aquatic resources from water quality degradation.
- "Wetland Hydroperiod" means the pattern of fluctuating water levels within a wetland caused by the complex interaction of surface water, groundwater, topography, soils and geology within a wetland.
- "Variance" shall mean the modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this chapter.

# **Article B. Stormwater Management for Development Activities**

# Sec. 4-11015. Minimum stormwater system design standards.

- (a) There shall be no increase in the base flood elevation within the special flood hazard area (SFHA), as delineated by the latest National Flood Insurance Program (NFIP) maps, or in any areas that are known to have flooded repetitively, or areas where a hydrologic model predicts flooding will occur in the 100-year, 24-hour event. Where hydrologic model results are conflicting, the stormwater management director shall decide which model will be used.
- (b) Finished floor elevations for structures not included in the special flood hazard area shall be equal to or higher than that shown on the original subdivision plat or neighborhood grading and drainage plan or as determined by a registered civil engineer.
- (c) The post-development peak rate of runoff shall not exceed the predevelopment peak rate of runoff for the one-, five-, ten-, and 25-year, 24-hour events.
- (d) If drainage calculations indicate that post-development runoff will exceed predevelopment runoff, then on-site detention for the one-, five-, ten-, and 25-year, 24-hour events is required at a discharge rate equal to the pre-developed 24-hour peak rate of discharge for all storm events from the one-, five-, ten-, and including the 25-year event, or the capacity of the existing downstream conveyance system must be upgraded in capacity to accommodate the additional 25-year, 24-hour discharge generated by the new development.
- (e) All stormwater management systems shall be designed to comply with the requirements of the latest City of Savannah Local Design Manual and comply with the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.
- (f) Drainage and/or access easements. The width and configuration requirements of drainage and maintenance easements/rights-of-way are listed in section 4.3.8 of the Stormwater Management Local Design Manual. Access and flow-through easements shall be provided to all stormwater management structures and outfalls.

(Ord. of 12-7-1995(1), § 1; Ord. of 12-27-2001(7), § 1(4-11023); Ord. of 12-12-2002(6), § 8(4-11023))

# Sec. 4-11016. Applicability and Exemptions

- 1) This ordinance shall be applied to all land disturbing activities, unless exempt pursuant to Section 4-11016 (2) below. The stormwater management regulations presented within shall be applied to any new development or redevelopment activity that meets one or more of the following criteria:
  - a) New development that involves the creation of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more.

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- b) Redevelopment that involves the creation, addition or replacement of 5,000 square feet or more of impervious cover or that involves other land disturbing activities of one acre or more.
- c) New development or redevelopment, regardless of size, that is part of a larger common plan of development, even though multiple, separate and distinct land disturbing activities may take place at different times and on different schedules.
- d) New development or redevelopment, regardless of size, that involves the creation or modification of a stormwater hotspot, as defined herein.
- 2) The following activities are exempt from Part B of this ordinance:
  - a) New development or redevelopment that involves the creation, addition or replacement of less than 5000 square feet of impervious surface, and that involves less than one acres of land disturbing activities.
  - b) New development or redevelopment activities on individual residential lots that are not part of a larger common plan of development and do not meet any of the applicability criteria listed above.
  - c) Additions or modifications to existing single-family homes and duplex residential units that do not meet any of the applicability criteria listed above, only after satisfying the local requirements listed in the Local Design Manual.
  - d) Development projects that are undertaken exclusively for agricultural or silvicultural purposes within areas zoned for agricultural or silvicultural land use, and that shall not include creation of additional impervious area.;
  - e) Maintenance and repairs of any green infrastructure or stormwater management practices deemed necessary by the Stormwater Management Director or his designee.
  - f) Redevelopment activities that involve the replacement of impervious cover when the original impervious cover was wholly or partially lost due to natural disaster or other acts of God occurring after April 1, 2012 and no additional impervious cover may be added under the exemption.
- 3) The following activities are exempt from Part B of this ordinance but remain subject to requirements in effect at the time of submittal.
  - a) New development or redevelopment described in an active Specific Development Plan, on file with the City as of the implementation date of the Stormwater Management Ordinance, which has not been cancelled, revoked, or which has not rested inactive without response to comment(s) by City department(s) for more than 180 calendar days.
  - b) Those parts of a land development project previously approved through Specific Development Plan phase, and whose land development permit has not expired that was approved prior to the adoption of this ordinance;

#### Sec. 4-11017. Designation of Ordinance Administrator

The Stormwater Management Director is hereby appointed to administer and implement the provisions of this ordinance.

#### Sec. 4-11018. Compatibility with Other Regulations

This ordinance is not intended to interfere with, modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

# Sec. 4-11019. Severability

If the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be judged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this ordinance.

# Sec. 4-11020. Stormwater Management Local Design Manual

The City of Savannah will utilize the information presented in the latest edition of the Coastal Stormwater Supplement (CSS) to the Georgia Stormwater Management Manual (GSMM), and the City of Savannah Stormwater Management Local Design Manual (LDM) to assist the implementation of this ordinance. The LDM shall serve as a companion document to the CSS and the GSMM. The LDM shall endeavor to accomplish the following: (1) clarify discrepancies between the CSS and any section of the City's Stormwater Management Ordinance and other related Development Regulations; (2) provide guidance to supplement information contained in the City's Stormwater Management Ordinance and to the related Development Regulations; (3) establish minimum stormwater management related design standards and criteria; and (4) further describe the stormwater management design preparation, submittal review, and approval requirements. The criteria within the LDM shall be considered minimum design standards and, in the event of a conflict, supersede design standards set forth in the CSS and/or the GSMM. A copy of the LDM shall be available from the City.

# Sec. 4-11021. Requirements and procedures for modifications and renewals of accepted stormwater management plans.

- (a) If construction does not begin within one year after stormwater management plan acceptance, it will be necessary to renew the acceptance of the stormwater management plan.
- (b) All requests for modifications and renewals shall be submitted in writing to the director and shall include justification for the request. The director or his designated representative shall review and make a determination on the request within ten working days.

(c) Acceptance of a stormwater management plan will be acknowledged by a letter from the director or his designated representative and will be valid for one year. Acceptance of a plan is solely an acknowledgment of satisfactory compliance with the requirements of these pertinent regulations and does not constitute a representation or warranty to the applicant or any other person concerning the safety, appropriateness, comprehensiveness, or effectiveness of any provision or omission from the stormwater management plan.

(Ord. of 12-7-1995(1), § 1; Ord. of 12-27-2001(7), § 1(4-11022))

#### PERMIT PROCEDURES AND PLANNING

#### Sec. 4-11022. Permit Application Requirements

No owner or developer shall undertake any development activity without first meeting the requirements of this ordinance and receiving approval for the proposed development activity from the City of Savannah. Unless specifically exempted by this ordinance, any owner or developer proposing a development project shall submit to the City of Savannah the required information in a format specified by the City of Savannah. Applications for sites that meet the applicability criteria in Sec. 4-11016 are described in the LDM Criteria for Sites Under 5000 s.f. Application requirements for Critical Water Resource Areas are described in the LDM Criteria for Critical Water Resource Areas. Unless otherwise exempted by this ordinance, the following items shall accompany a permit application:

- (1) Stormwater management concept plan prepared in accordance with Section 4-11024;
- (2) Record of a consultation meeting held in accordance with Section 4-11025;
- (3) Stormwater management design plan prepared in accordance with Section 4-11026;
- (4) Stormwater management system inspection and maintenance agreement and plan prepared in accordance with Section 4-11027;
- (5) Permit application and plan review fees prepared in accordance with the City's most recently adopted fee schedule; and,
- (6) Performance bond (or other means of security acceptable to the City of Savannah) prepared in accordance with Section 4-11030.

The LDM provides additional details and requirements pertaining to the preparation, submittal, review and approval process associated with stormwater management design and development plans.

#### Sec 4-11024. Stormwater Management Concept Plan

Prior to the preparation and submittal of a stormwater management design plan and permit application, the owner or developer shall submit to the City of Savannah for review and approval, a stormwater management concept plan, as specified in the Local Design Manual,

illustrating the layout of the proposed development project and showing, in general, how post-construction stormwater runoff will be managed on the development site.

Green infrastructure practices (i.e., better site planning techniques, better site design techniques, low impact development practices) are encouraged to be used during the creation of a stormwater management concept plan. Green infrastructure practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens. The LDM provides additional detail regarding the requirements for the Stormwater Management Concept Plan.

Projects of less than 1.0 acre in size may request a waiver of concept plan submittal. In lieu of the concept submittal, the items become due with the Stormwater Management Design Plan submittal.

# Sec. 4-11025. Consultation Meeting & Coordination

All applicants are encouraged to hold a consultation meeting with the City of Savannah to discuss the proposed development project, the stormwater management concept plan, and the approach that was used to satisfy the post-construction stormwater management and site planning and design criteria that apply to the development site. This consultation meeting shall take place prior to approval of the stormwater management concept plan, for the purposes of verifying site conditions and the feasibility of the stormwater management concept plan in relationship to requirements of other departments of the City or MPC..

#### Sec. 4-11026. Stormwater Management Design Plan

Subsequent to approval of the stormwater management concept plan, the owner or developer shall submit to the Stormwater Management Director, or his designee, for review and approval, a stormwater management design plan that details how post-development stormwater runoff will be controlled or managed on the development site. The stormwater management design plan shall detail how the proposed development project will meet the post-construction stormwater management and site planning and design criteria that apply to the development site, as specified in the Local Design Manual and Coastal Stormwater Supplement.

A copy of the stormwater management concept plan shall be included with the submittal of the stormwater management design plan. The stormwater management design plan should be consistent with the stormwater management concept plan. If any significant changes were made to the plan of development, the Stormwater Management Director, or his designee may ask for a written statement providing rationale for any of the changes.

The Stormwater Management Design Plan shall include a certification by the plan preparer that the plan and design meets the requirements of the City's Flood Prevention Ordinance, and Stormwater Management Ordinance. The Stormwater Management Design Plan shall include a certification by the site owner that the project will be completed according to the approved design.

#### Sec. 4-11027. Stormwater Facility Inspection and Maintenance Agreement

Prior to the issuance of a permit for any new development or redevelopment activity that requires one, the applicant, or owner of the development site, if different, must execute an inspection and maintenance agreement and plan that shall be binding on all subsequent owners of the site, unless the stormwater management system is dedicated to and accepted by the City of Savannah. A sample copy of the Stormwater Facility Inspection & Maintenance Agreement is included in the City of Savannah Stormwater Management LDM. The LDM provides additional details regarding the requirement for the Stormwater Management Design Plan.

#### Sec. 4-11028. Stormwater Management Design Submittal & Approval Procedure

- (1) Stormwater management design review and approval requests shall be filed with the City of Savannah in a format specified by the City.
- (2) Stormwater management design review and approval requests shall include the items set forth herein.
- (3) The City of Savannah shall inform the applicant whether the application, stormwater management design plan and inspection and maintenance agreement and plan are approved or disapproved. The delivery to the applicant of comments on the submitted design constitutes disapproval.
- (4) Following disapproval the applicant may then revise any item not meeting the requirements of this ordinance and resubmit the package.
- (5) Upon a finding by the City of Savannah that the design package, the stormwater management design plan; and/or the inspection and maintenance agreement, if applicable, meet the requirements of this ordinance, the City of Savannah may issue a permit for the development project, provided that all other legal requirements for the issuance of the land disturbance permit have been met.
- (6) Notwithstanding approval of the stormwater management design, in undertaking the new development or redevelopment activity, the applicant or other responsible person shall be subject to the following requirements:
- (a) The applicant shall comply with all applicable requirements of the approved stormwater management design plan and the provisions of this ordinance, and shall certify that all land disturbing development activities will be completed in accordance with the approved stormwater management design and post-construction maintenance plan;
- (b) The development project shall be conducted only within the area specified in the approved stormwater management design plan. Land disturbance outside of the delineated project area shall constitute a violation of this ordinance and the land disturbance permit;
- (c) The City of Savannah shall be allowed to conduct periodic inspections of the development project in accordance with applicable sections of this ordinance;
- (d) No changes may be made to an approved stormwater management design plan without review and written approval by the Stormwater Management Director, or his designee; and.

(e) Upon completion of the development project, the applicant or other responsible person shall submit a statement certifying that the project has been completed in accordance with the approved stormwater management design plan and the provisions of this ordinance, and a Georgia registered professional engineer shall certify that the stormwater management design and post-construction maintenance plan have been completed in accordance with the permit.

Sec. 4-11029. Section Reserved.

#### Sec. 4-11030. Performance Bonds

The City of Savannah shall require, from the owner, a surety or maintenance bond, a cash bond, irrevocable letter of credit or other means of security acceptable to the City of Savannah immediately prior to the issuance of an LDA permit for any new development or redevelopment activity in accordance with the applicable sections of the City of Savannah Code of Ordinances.

#### Sec. 4-11031. Compliance Through Off-Site Stormwater Management Practices

All stormwater management design plans shall include on-site stormwater management practices, unless arrangements are made with the Stormwater Management Director to manage post-construction stormwater runoff in an off-site or regional stormwater management practice. The off-site or regional stormwater management practice must be located on property legally dedicated to that purpose, be designed and sized to meet the post-construction stormwater management criteria presented in the City of Savannah LDM, provide a level of stormwater quality and quantity control that is equal to or greater than that which would be provided by on-site green infrastructure and stormwater management practices and have an associated inspection and maintenance agreement and plan. In addition, appropriate stormwater management practices shall be installed, where necessary, to protect properties and drainage channels that are located between the development site and the location of the off-site or regional stormwater management practice.

To be eligible for compliance through the use of off-site stormwater management practices, the applicant must submit a stormwater management design plan to the City of Savannah that shows the adequacy of the off-site or regional stormwater management practice and demonstrates, to the satisfaction of the City of Savannah that the off-site or regional stormwater management practice will not result in any of the following impacts:

- (1) Increased threat of flood damage or endangerment to public health or safety;
- (2) Deterioration of existing culverts, bridges, dams and other structures;
- (3) Accelerated streambank or streambed erosion or siltation;
- (4) Degradation of in-stream biological functions or habitat; or,
- (5) Water quality impairment in violation of state water quality standards and/or violation of any other state or federal regulations.

#### Sec. 4-11032. Construction Inspection of Stormwater Management Systems

The LDM provides additional information and details regarding approved construction materials and practices regarding stormwater management controls and systems.

#### Sec. 4-11033. Notice of Construction Commencement

The applicant must notify the City of Savannah prior to the commencement of construction on a development site in order to schedule a pre-construction meeting on the project site. A pre-construction meeting is required prior to authorization to begin construction by the City of Savannah. In addition, the applicant must notify the City of Savannah in advance of the installation of critical components of the stormwater management system shown on the approved stormwater management design plan. The City of Savannah may, at its discretion, issue verbal or written authorization to proceed with the installation of critical components of the stormwater management system, such as permanent green infrastructure and stormwater management practices, based on the stabilization of contributing drainage areas and other factors.

# Sec. 4-11034. Inspections During Construction

Periodic inspections of the green infrastructure and stormwater management practices shown on the approved stormwater management design plan shall be conducted by staff or representatives of the City of Savannah during construction. Construction inspections shall utilize the approved stormwater management design plan for establishing compliance with the provisions of this ordinance. All inspections shall be documented in written reports that contain the following information:

- (1) The date and location of the inspection;
- (2) The name of the inspector;
- (3) Whether construction is in compliance with the approved stormwater management design plan;
- (4) Violations of the approved stormwater management design plan; and,
- (5) Any other variations from the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing about the nature of the violation and the remedial measures that are required to bring the action or inaction into compliance with the approved stormwater management design plan, as described in this ordinance. In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in this ordinance may be taken against the applicant.

#### Sec. 4-11035. Final Inspection and As Built Plans

Subsequent to the final installation and stabilization of all green infrastructure and stormwater management practices shown on the approved stormwater management design plan, and before the issuance of a certificate of occupancy, the applicant is responsible for certifying that the project has been completed in accordance with the approved stormwater management design plan and for submitting the certification of correctness by a Georgia licensed professional engineer.. , Within 60 days of issuance of the Certificate of Occupancy, the applicant is responsible for submitting as built plans for all green infrastructure and stormwater management practices shown on the approved stormwater management design plan. The as built plans must show the final design specifications for all green infrastructure and stormwater management practices, the final stormwater system elevations based on the North American Vertical Datum 1988, and the final stormwater system volumes where they were provided as a part of the system design.. A final inspection shall be conducted by the staff or representatives of the City of Savannah to confirm the accuracy of the as built plans. A final inspection is required before any performance bond or other guarantee can be released.

# **Ongoing Inspection and Maintenance of Stormwater Management Systems**

#### Sec. 4-11036. Maintenance Responsibility

The responsible party named in the recorded stormwater management system inspection and maintenance agreement and plan shall maintain in good condition and promptly repair and restore all green infrastructure and stormwater management practices, maintenance access routes and appurtenances, including, but not limited to surfaces, walls, drains, dams, structures, vegetation, erosion and sediment control practices and other protective devices. Such repairs and restoration and maintenance activities shall be performed in accordance with an approved inspection and maintenance agreement and plan.

If the responsible party named in the recorded inspection and maintenance agreement and plan is a homeowner's association or other owner's association, such as a unit owner's association, the responsible party shall submit to the Stormwater Management Director a copy of a recorded declaration that provides:

- (1) That green infrastructure and stormwater management practices are part of the common elements of the development site and shall be subject to the requirements of the stormwater management system inspection and maintenance agreement and plan;
- (2) That membership in the association shall be mandatory and automatic for all homeowners or unit owners of the development site and their successors;
- (3) That the association shall have lien authority to ensure the collection of dues from all members;
- (4) That the requirements of the inspection and maintenance agreement and plan shall receive the highest priority for expenditures by the association except for any other expenditures that are required by law to have a higher priority;
- (5) That a separate fund shall be maintained by the association for the routine maintenance, reconstruction and repair of the green infrastructure and stormwater management practices,

and kept in an account insured by the Federal Deposit Insurance Corporation (FDIC) or by another entity acceptable to the City of Savannah;

- (6) That the routine maintenance, reconstruction and repair fund shall contain at all times the dollar amount reasonably determined from time to time by the City of Savannah to be adequate to pay for the probable reconstruction and repair cost (but not routine maintenance cost) of the stormwater management system for a three-year period; and,
- (7) That, to the extent permitted by law, the association shall not enter into voluntary dissolution unless responsibility for the green infrastructure and stormwater management practices is transferred to an appropriate successor.

#### Sec. 4-11037. Maintenance Inspections

Periodic inspections of the green infrastructure and stormwater management practices shown on an approved stormwater management design plan, and subject to the terms and conditions of an approved inspection and maintenance agreement and plan, shall be conducted by staff or representatives of the City of Savannah to document repair and maintenance needs and ensure compliance with the requirements of the approved inspection and maintenance agreement and plan and provisions of this ordinance. All inspections should be documented in written reports that contain the following information:

- (1) The date and location of the inspection;
- (2) The name of the inspector;
- (3) The condition of:
  - (a) Vegetation and filter media;
  - (b) Fences and other safety devices;
  - (c) Spillways, valves and other hydraulic control structures;
  - (d) Embankments, slopes and safety benches;
  - (e) Reservoirs and permanent pools;
  - (f) Inlet and outlet channels and structures;
  - (g) Underground drainage structures;
  - (h) Sediment, debris and litter accumulation in storage and forebay areas;
  - (i) Any other item that could affect the proper function of the stormwater management system; and,
- (4) A description of repair, restoration and maintenance needs. If any repair, restoration or maintenance needs are found, the responsible party named in the recorded stormwater management system inspection and maintenance agreement and plan shall be notified in

writing about the repair, restoration or maintenance needs and the remedial measures that are required to bring the stormwater management system into compliance with the approved stormwater management system inspection and maintenance agreement and plan, as described in **Sec. 4-11027**of this ordinance. In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in **Sec. 4-11010**of this ordinance may be taken against the responsible party named in the approved stormwater management system inspection and maintenance agreement and plan.

#### Sec. 4-11038. Records of Maintenance Activities

The responsible party shall make and maintain records of all inspections, maintenance and repairs, and shall retain the records for a minimum of five years. These records shall be made available to the Stormwater Director or his designee during inspections and at other reasonable times upon request of the City of Savannah.

#### Sec. 4-11039. Failure to Maintain

If the responsible party fails or refuses to meet the terms and conditions of an approved stormwater management system inspection and maintenance agreement and plan and/or the requirements of this ordinance, the City of Savannah, after thirty (30) days written notice (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours notice shall be sufficient), may correct a violation by performing the work necessary to place the green infrastructure or stormwater management practice in proper working condition. The City of Savannah may assess the responsible party for the cost of the repair work, which shall be a lien on the property, and may be placed on the ad valorum tax bill for such property and collected in the ordinary manner for such taxes by the City of Savannah.

## **Article C. Stormwater Quality**

# Sec. 4-11040. Exemptions.

The following discharges are exempt from the discharge limitations set forth in section 4-11041 of this chapter:

- (1) Water line flushing and other discharges from potable water sources;
- (2) Landscape irrigation and lawn watering;
- (3) Irrigation water;
- (4) Diverted stream flows;
- (5) Rising groundwaters;
- (6) Infiltration to separate storm drains;
- (7) Uncontaminated pumped groundwater;
- (8) Foundation and footing drains;
- (9) Water from crawl space pumps;
- (10) Air conditioning condensation;
- (11) Springs;
- (12) Individual residential car washing;
- (13) Snowmelt;
- (14) Flows from riparian habitats and wetlands;
- (15) Dechlorinated swimming pool discharges;
- (16) Flows from firefighting.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11041. Stormwater discharge limitations.

Discharges to the city's separate stormwater system shall, to the maximum extent practicable, not create a nuisance, cause interference with the legitimate use of city separate stormwater system, and shall not create the following conditions:

- (1) Foam or floating, suspended or deposited macroscopic particulate matter;
- (2) Bottom deposits or aquatic growth;

- (3) Alteration of temperature, turbidity, or apparent color beyond present natural background levels:
- (4) Visible, floating, suspended, or deposited oil, grease, or any products of petroleum origin;
- (5) Toxic or deleterious substances to be present in concentrations or quantities which will cause harmful effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11042. Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the water course within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or integrity of the watercourse.

#### Sec. 4-11043. Accidental discharge reporting requirements.

In the event of an accidental discharge to the city's separate stormwater system of any material or substance other than stormwater runoff or those discharges specifically excluded in section 4-11027, the stormwater department shall be contacted immediately of the nature, quantity and time of occurrence of the discharge. The responsible party shall take immediate steps to contain, treat or to otherwise minimize effects of the discharge on the city's system and receiving streams. Immediate steps shall be taken to ensure no recurrence of the discharge. A written report addressed to the director of stormwater management detailing the date, time, cause, quantity, and characteristics of the discharge and the corrective and preventative actions taken will be sent to the director within five working days of the incident.

(Ord. of 12-7-1995(1), § 1)

#### Sec. 4-11044. Industrial/commercial activities.

- (a) Any facility with stormwater discharges associated with industrial activity that discharges directly or indirectly to the City of Savannah separate stormwater system is required to submit a copy of their Industrial General NPDES permit Notice of Intent or individual NPDES permit, and Stormwater Pollution Prevention Plan to the Stormwater Management Director. All monitoring reports and annual reports required under the permit shall be made available upon request by the Stormwater Management Director, or his designee.
- (b) Any industrial or commercial activity not required to obtain an NPDES permit as defined by Georgia EPD regulation 391-3-6-.16, but discharges stormwater to the city separate stormwater system is required to submit to the Stormwater Management Director the type of

industrial/commercial activity, type of discharge, a site map with internal drainage system, and point of connection or discharge to the city separate storm sewer system.

(Ord. of 12-7-1995(1), § 1)

**END OF SECTION**